WATER SUPPLY OUTLOOK

KOOTENAI RIVER BASIN

MONTANA

as of

APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow pack continues to be near or above record amounts at the high and median elevations, and generally above average at low elevations. The snow pack is dense which will help extend the runoff, but soils under the snow at lower elevations are wet and will absorb very little snow melt as runoff begins.

Runoff of the Kootenai River for the April through September period is forecast to be the second largest volume in the past 30 years, exceeded only by the flow of 1954. Streams flowing into the Kootenai in Montana are forecast in the 15 to 20 percent above average range.

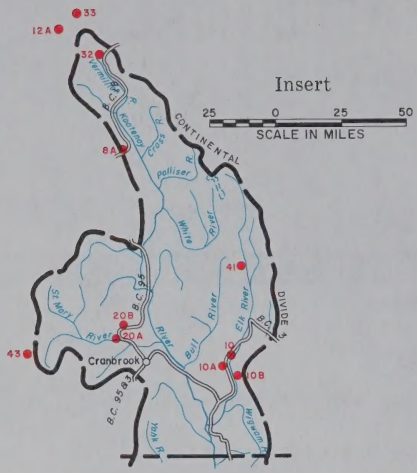
Water levels will depend largely on temperature and precipitation during the snow melt period and should be observed closely by those who live near the water courses. Late season irrigation supplies are expected to be above average.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 3020 FISHER RIVER NEAR JENNINGS				342	264	250	440	271	486	286	210	383	274	291	257	318	162	264	302	
STATION NO. 3030 KOOTENAI RIVER AT LIBBY	9630	5952	8416	9686	7268	7359	10425	7370	9664	6855	6431	9666	7384	8688	6644	8096	7058	7820	8043	

Report prepared by
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

KOOTENAI RIVER BASIN

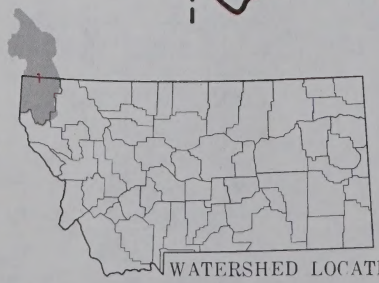


LEGEND

- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary

See Insert

C A N A D A



10 0 10
SCALE IN MILES

SNOW SURVEY DATA

WATERSHED 1

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
NO.	NAME	ELEVATION				LAST YEAR	AVERAGE
15B11	Baree Creek	5500	3/31	148	56.6	45.0	50.5
15B16	Baree Midway	4600	3/31	120	39.0	35.0	-
15B15	Baree Trail	3800	3/31	30	9.4	9.6	-
14A04	Brush Creek	5000	3/29	44	15.0	12.8	14.3*
BC 10	Fernie	3500	3/31	35	10.6	8.7	9.5
BC 12A	Field	4200	3/31	32	9.9	4.6	5.4
BC 11	Glacier	4100	3/30	114	53.4	30.4	27.6
14A11	Graves Creek	4300	3/28	67	25.3	17.4	-
BC 43	Gray Creek	5100	3/29	79	26.1	20.3	19.7
BC 33	Kicking Horse	5400	3/31	65	21.3	13.6	14.8
BC 20B	Kimberley	3800	3/31	27	8.9	6.9	7.7
BC 32	Marble Canyon	5000	3/29	57	18.7	-	13.8
BC 10B	Morrissey Ridge	6100	3/31	107	37.5	-	-
BC 10A	New Fernie	4100	3/31	68	23.0	16.1	15.4*
15A01	Red Mountain	6000	3/27	74	27.1	20.0	21.4
BC 8A	Sinclair Pass	4500	3/29	33	9.4	-	5.4
BC 20A	Sullivan Mine	5100	3/30	61	20.4	13.7	15.6
BC 41	Upper Elk River	4400	3/27	29	9.5	6.5	8.2
14A07	Weasel Divide	5450	3/28	124	53.0	31.2	34.1

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
			DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
NO.	NAME	ELEVATION						
15B15M	Baree Trail	3800	48	7.5	3/31	5.2	7.6	-
14A10M	Murphy Lake R.S.	3000	48	22.6			22.2	-
15A02M	Raven R.S.	3050	48	23.0	4/3	22.2	22.2	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 1

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE
	FISHER RIVER					
3020	Jennings (near)	Apr-Sept	360	113	247	318
	KOOTENAI RIVER					
3030	Libby (at)	Apr-Sept	10,300	127	7,929	8,096
	YAAK RIVER					
3045	Troy (near)	Apr-Sept	680	122	564	555
	KOOTENAI RIVER					
3050	Leonia (at)	Apr-Sept	11,600	125	9,176	9,327

*PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

FLATHEAD RIVER BASIN

MONTANA

as of

APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

High elevation snow pack in the Flathead headwaters is presently third highest to maximum of record, while median elevations are fifth to second highest. Low elevations have above average snow accumulation. The snow pack is quite dense for this time of year and will help delay the high elevation melt. Low and median elevation soils are generally wet and will absorb very little snow water when melt begins.

The April through September runoff is forecast to be the second to fifth largest volume in the past 30 years. Water levels will depend largely on temperature and precipitation during the snow melt period and should be observed closely by those who live near water courses.

Hungry Horse storage is below average and will help reduce peak flows downstream from the South Fork.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 3630 FLATHEAD RIVER AT COLUMBIA FALLS	6837	5331	7749	7225	5732	6522	8267	5707	7164	5716	5053	8053	5888	6232	5978	6497	4937	7398	7418	
STATION NO. 3700 SWAN RIVER NEAR BIG FORK	841	514	807	686	619	604	676	570	750	575	568	997	724	707	771	694	533	706	844	

Report prepared by

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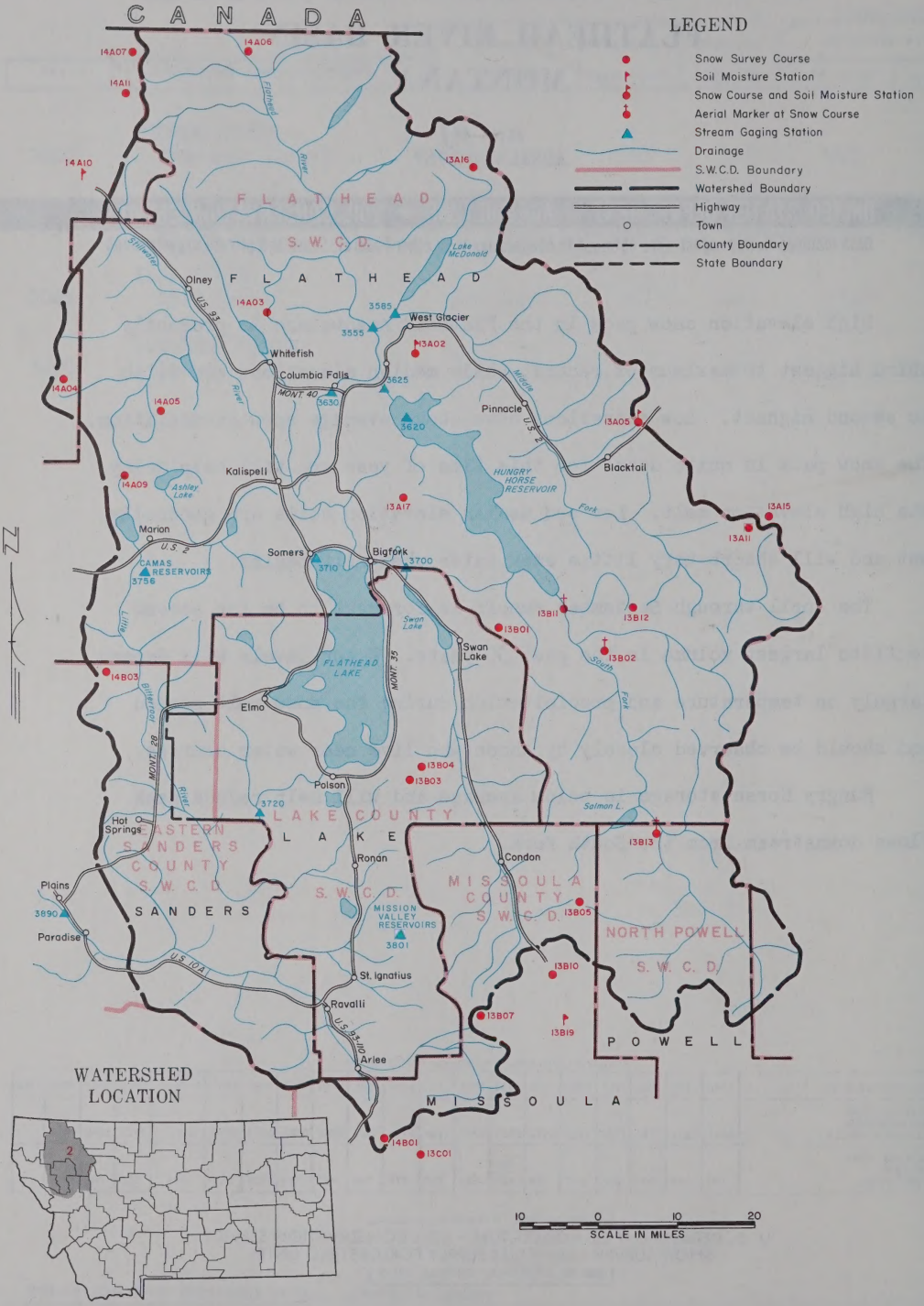
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

"The Conservation of Water begins with the Snow Survey"

FLATHEAD LAKE RIVER BASIN



SNOW SURVEY DATA

WATERSHED 2

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
NO.	NAME	ELEVATION				LAST YEAR	AVERAGE
13A15	Badger Pass	6900	4/2	111	43.4	34.2	-
14B03	Bassoo Peak	5150	3/27	38	13.1	13.2	13.4*
13A11	Beaver Lake	5900	4/2	78	31.1	21.6	-
13B03	Big Creek	6750	3/29	134	55.2	37.0	46.4
14A04	Brush Creek	5000	3/29	44	15.0	12.8	14.3*
13A17	Camp Misery	6400	3/31	161	64.2	40.6	43.0*
13B10	Coyote Hill	4200	3/30	37	12.8	5.9	11.0
13A02	Desert Mountain	5600	3/30	61	20.9	14.8	16.9
13B04	Fatty Creek	5500	3/29	84	31.0	20.3	21.7*
BC 10	Fernie	3500	3/31	35	10.6	8.7	9.5
14A11	Graves Creek	4300	3/28	67	25.3	17.4	-
14A09	Griffin Creek Divide	5150	3/28	45	15.8	9.9	14.3*
13B12	Gunsight Lake	6300	4/2	135	54.4	38.9	-
14A03	Hell Roaring Divide	5770	3/31	110	45.7	29.2	32.3
13B13	Holbrook	4530	4/3	37	14.8	10.6	10.4*
14A06	Kishenehn	3890	3/30	35	10.9	7.6	10.4
14A05	Logan Creek	4300	3/29	33	9.7	6.8	9.5
13A05	Marias Pass	5250	3/29	68	24.3	18.3	20.1
13A16	Mineral Creek	4000	3/30	75	33.7	18.1	22.9
BC 10B	Morrissey Ridge	6100	3/31	107	37.5	-	-
BC 10A	New Fernie	4100	3/31	68	23.0	16.1	15.4*
13B07	North Fork Jocko	6330	3/30	152	58.2	36.6	46.7
13B02	Spotted Bear Mountain	7000	4/3	57	22.3	13.4	15.5
13C01	Stuart Mountain	7400	3/27	88	35.4	28.0	32.6
13B01	Trinkus Lake	6100	4/3	139	59.6	39.4	44.2*
14B01	TV Mountain	6800	3/26	59	20.6	17.0	18.7*
13B11	Twin Creeks	3580	4/3	40	16.2	12.8	12.1*
13B05	Upper Holland Lake	7000	4/3	114	47.4	31.0	36.3*
14A07	Weasel Divide	5450	3/28	124	53.0	31.2	34.1

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
			DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
NO.	NAME	ELEVATION						
13A02M	Desert Mountain	5600	54	8.4	3/31	8.2	7.4	7.4
12A05M	Marias Pass	5250	54	6.5	3/31	5.5	5.8	5.5
14A10M	Murphy Lake	3000	48	22.6			22.2	-
13B19M	Seeley Lake	4030	48	11.9	4/4	10.4	12.4	8.5

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 2

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE
	NORTH FORK FLATHEAD RIVER					
3555	Columbia Falls (near)	Apr-Sept	2570	127	1878	2027
	MIDDLE FORK FLATHEAD RIVER					
3585	West Glacier (near)	Apr-Sept	2300	120	1755	1923
	SOUTH FORK FLATHEAD RIVER					
3625	Columbia Falls (near)(7)	Apr-Sept	2900	122	2004	2381
	FLATHEAD RIVER					
3630	Columbia Falls (at)(7)	Apr-Sept	7960	122	5670	6497
	SWAN RIVER					
3700	Big Fork (near)	Apr-Sept	890	128	594	694
	FLATHEAD RIVER					
3720	Polson (near)(8)	Apr-Sept	9650	124	6841	7778

(7) Adjusted for storage in Hungry Horse Reservoir.
(8) Adjusted for storage in Hungry Horse Reservoir and Flathead Lake.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
3620	Hungry Horse	3,428.0	1,551.0	2,214.0	2,244.4
3710	Flathead Lake	1,791.0	731.3	650.4	690.8
3756	Camas (4)	45.2	27.1	31.0	33.8
3801	Mission Valley (8)	100.3	26.4	63.6	37.2

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

LOWER CLARK FORK RIVER BASIN

MONTANA

as of

APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow pack is a little above average for this date except for near record amounts in the higher elevations of the Mission Range. The snow pack is presently about one-third greater than a year ago and 5 percent above the 1948-62 average.

The Blackfoot, upper Clark Fork and Bitterroot Rivers are forecast to combine for about 5 percent above average runoff. Streams flowing into the lower Clark Fork are forecast near average. The Flathead River is expected to produce about the third highest volume in the past 30 years and will combine with the Clark Fork for about 15 percent above average runoff out of Montana.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

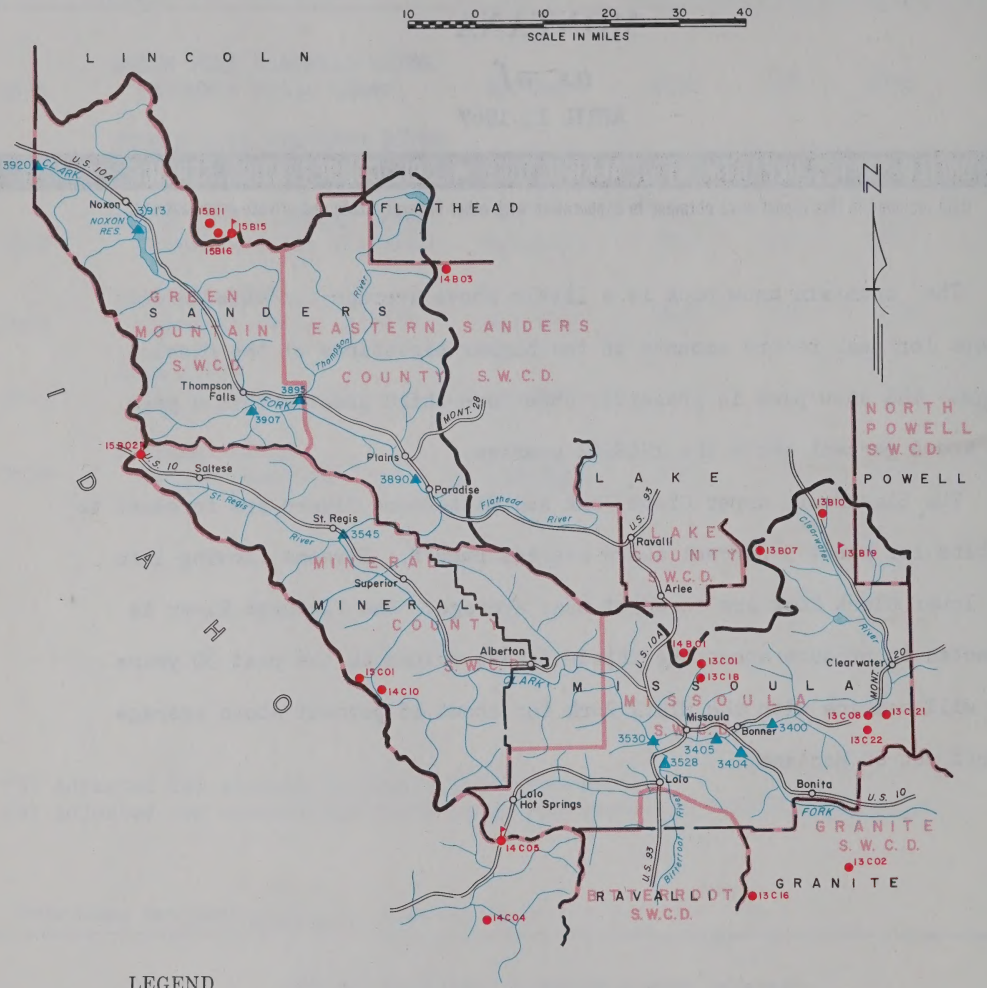
STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 3405 CLARKS FORK RIVER ABOVE MISSOULA	2470	1590	2030	2369	1782	1887	1737	1590	2012	1577	1699	2044	1452	1250	1812	1838	1427	2130	2517	
STATION NO. 3895 THOMPSON RIVER NEAR THOMPSON FALLS									428	276	177	366	268	290	250	302	175	232	312	

Report prepared by

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

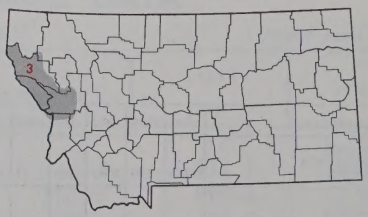
"The Conservation of Water begins with the Snow Survey"

LOWER CLARK FORK RIVER BASIN



LEGEND

- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary



WATERSHED LOCATION

SNOW SURVEY DATA

WATERSHED 3

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
NO.	NAME	ELEVATION				LAST YEAR	AVERAGE
13C16	Ambrose	6480	3/26	47	15.4	12.8	14.3*
15B11	Baree Creek	5500	3/31	148	56.6	45.0	50.5
15B16	Baree Midway	4600	3/31	120	39.0	35.0	-
15B15	Baree Trail	3800	3/31	30	9.4	9.6	-
14B03	Bassoo Peak	5150	3/27	38	13.1	13.2	13.4*
13B10	Coyote Hill	4200	3/30	37	12.8	5.9	11.0
14C10	Heart Lake Trail	4800	3/27	75	28.0	23.4	-
15C10	Hoodoo Basin Pillow	6000	4/1	SP	54.8	-	-
15C01	Hoodoo Creek	5900	3/27	141	53.4	42.6	53.4
14C05	Lolo Pass	5230	3/27	94	37.8	27.5	36.4*
15B02	Lookout	5250	3/30	114	40.8	34.3	40.5
13C21	Lubrecht Forest No. 3	5450	3/29	29	7.4	5.0	8.2*
13C22	Lubrecht Forest No. 4	4650	3/29	11	2.8	0.8	3.5*
13C08	Lubrecht Forest No. 6	4040	3/29	8	2.3	0.6	3.5*
13B07	North Fork Jocko	6330	3/30	152	58.2	36.6	46.7
14C04	Savage Pass	6600	3/27	85	32.0	25.9	30.5*
13C02	Slide Rock Mountain	7100	3/29	49	16.8	13.2	16.0
13C18	Spring Gulch	6000	3/27	38	12.9	8.7	12.5*
13C01	Stuart Mountain	7400	3/27	88	35.4	28.0	32.6
14B01	TV Mountain	6800	3/26	59	20.6	17.0	18.7*

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
			DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
NO.	NAME	ELEVATION						
15B15M	Baree Trail	3800	48	7.5	3/31	5.2	7.6	-
14C05M	Lolo Pass	5250	48	10.6	3/27	4.0	6.2	6.2
13B19M	Seeley Lake	4030	48	11.9	4/4	10.4	12.4	8.5

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 3

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE
	BLACKFOOT RIVER					
3400	Bonner (near)	Apr-Sept	1,220	118	717	1,036
	CLARK FORK RIVER					
3404	Milltown (above)(4)	Apr-Sept	820	102	483	802
	CLARK FORK RIVER					
3405	Missoula (above)	Apr-Sept	2,040	111	1,203	1,838
	RATTLESNAKE CREEK					
3410	Missoula (at)	Apr-Sept	74.5	109	58.2	68.2
	BITTERROOT RIVER					
3528	Missoula (at)(6)	Apr-Sept	1,510	97	813	1,553
	CLARK FORK RIVER					
3530	Missoula (below)	Apr-Sept	3,550	105	2,016	3,391
	CLARK FORK RIVER					
3545	St. Regis (at)	Apr-Sept	4,700	101	3,000	4,642
	CLARK FORK RIVER					
3890	Plains (near)(8)	Apr-Sept	14,750	115	9,968	12,793
	THOMPSON RIVER					
3895	Thompson Falls (near)	Apr-Sept	314	104	212	302
	PROSPECT CREEK					
3907	Thompson Falls (at)	Apr-Sept	173	105	124	165
	CLARK FORK RIVER					
3920	Whitehorse Rapids (at)(9)	Apr-Sept	16,500	114	11,474	14,398

(4) Difference in observed flow, Clark Fork above Missoula & Blackfoot near Bonner.
(6) Difference in observed flow, Clark Fork above and below Missoula.
(8) Adjusted for storage in Flathead Lake and Hungry Horse Reservoir.
(9) Adjusted for storage in Flathead Lake, Hungry Horse and Noxon Reservoirs.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
3913	Noxon Rapids	334.6	158.9	189.0	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

UPPER CLARK FORK RIVER BASIN

MONTANA

as of
APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow pack is presently about 60 percent larger than a year ago and about 10 percent above the 1948-62 average. The pack is quite dense for this time of year and should help delay runoff from high elevations. Late season irrigation supplies are expected to be near to a little above average.

Streamflow is forecast near average on Clark Fork tributaries and those south of the Blackfoot River. Those streams north of the Blackfoot River should be 15 to 25 percent above average. Runoff will be adequate to fill reservoirs in the area. Soils are fairly wet under the snow pack and will absorb very little moisture from snow melt before runoff occurs.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 3404 CLARKS FORK RIVER ABOVE MILLTOWN	1428	778	900	1073	833	806	611	739	880	655	790	706	634	475	722	802	708	1025	1149	
STATION NO. 3400 BLACKFOOT RIVER NEAR BONNER	1312	812	1130	1295	948	1080	1126	851	1132	922	909	1338	818	775	1089	1036	719	1105	1368	

Report prepared by
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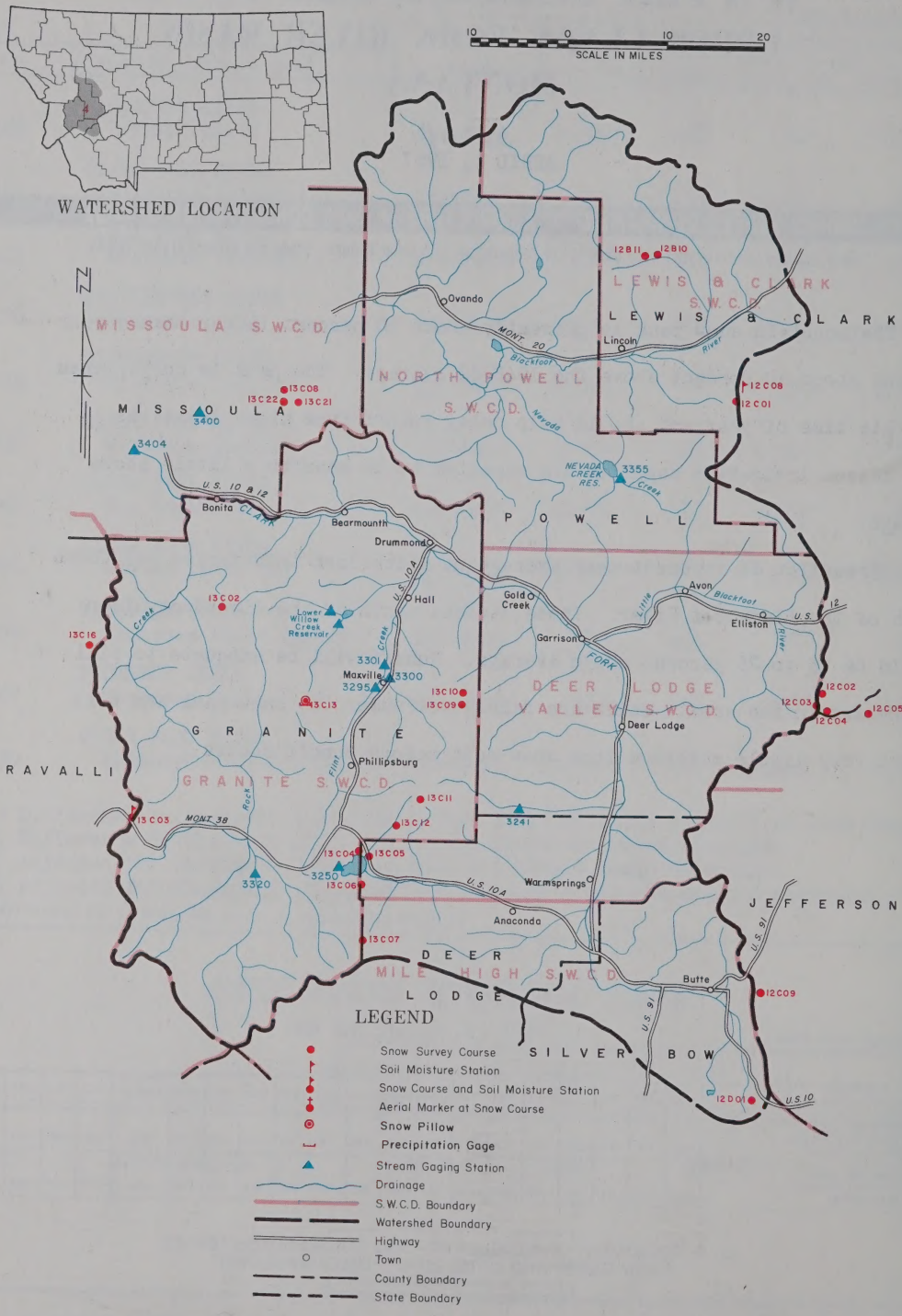
BOX 98, BOZEMAN, MONTANA 59715

"The Conservation of Water begins with the Snow Survey"

UPPER CLARK FORK RIVER BASIN

WATERSHED LOCATION



MT-4b

SNOW SURVEY DATA

WATERSHED 4

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
NO.	NAME	ELEVATION				LAST YEAR	AVERAGE
13C16	Ambrose	6480	3/26	47	15.4	12.8	14.3*
13C13	Black Pine	7100	3/28	47	16.8	10.5	14.6*
13C13	Black Pine Pillow	7100	3/28	SP	16.4	10.9	-
12C05	Chessman Reservoir	6200	3/29	20	5.6	1.2	4.9
12B10	Copper Creek	5700	3/31	58	22.8	13.2	-
12C09	Copper Mountain	7700	3/30	47	13.4	9.0	-
12B11	Cotter Mine	6250	3/31	66	26.0	15.5	-
13C09	El Dorado Mine	7800	3/31	81	23.6	15.4	22.6*
13C11	Fred Burr Pass	8000	3/28	79	30.0	18.2	29.0*
13C10	Gold Creek Lake	7200	3/31	59	18.8	12.4	17.0*
13C04	Intergaard	6450	3/31	38	11.8	5.6	8.5*
13C21	Lubrecht Forest No. 3	5450	3/29	29	7.4	5.0	8.2*
13C22	Lubrecht Forest No. 4	4650	3/29	11	2.8	0.8	3.5*
13C08	Lubrecht Forest No. 6	4040	3/29	8	2.3	0.6	3.5*
12D01	Pipestone Pass	7200	3/28	25	7.0	4.6	6.2
13C12	Red Lion	7100	3/28	52	18.2	11.4	17.5*
13C03	Skalkaho Summit	7260	3/30	82	30.8	20.4	27.4
13C02	Slide Rock Mountain	7100	3/29	49	16.8	13.2	16.0
13C05	Southern Cross	6500	3/31	33	10.5	4.8	7.0*
12C01	Stemple Pass	6600	3/30	47	15.4	8.3	11.0
13C07	Storm Lake	7780	3/27	48	15.5	9.8	15.5
13C06	Stuart Mill	6500	3/31	32	10.2	4.7	7.5*
12C02	Ten Mile Lower	6600	3/29	32	10.2	3.4	7.2
12C03	Ten Mile Middle	6800	3/28	40	13.3	7.0	11.2
12C04	Ten Mile Upper	8000	3/28	45	15.1	9.3	14.3

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
			DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
NO.	NAME	ELEVATION						
13C13M	Black Pine	7100	48	10.0	3/28	7.9	5.9	-
13C15M	Georgetown Lake	6450	48	9.0	3/27	5.1	3.6	3.5
13C03M	Skalkaho Summit	7260	48	10.8	3/30	9.9	10.0	-
12C08M	Stemple Pass	6350	48	5.9	3/31	4.0	5.2	4.7

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 4

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	RACETRACK CREEK					
3241	Anaconda (near)	Apr-Sept	38.0	100	24.9	38.0
	FLINT CREEK					
3301	Boulder Creek (below)(3)	Apr-Sept	72.8	100	47.3	73.0
	MIDDLE FORK ROCK CREEK					
3320	Philipsburg (near)	Apr-Sept	85.0	109	43.8	77.8
	BLACKFOOT RIVER					
3400	Bonner (near)	Apr-Sept	1220	118	717	1036
	CLARK FORK RIVER					
3404	Milltown (above)(4)	Apr-Sept	820	102	483	802

(3) Sum, Flint Creek at Maxville and Boulder Creek at Maxville.
(4) Difference in observed flow, Clark Fork above Missoula and Blackfoot near Bonner

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
3250	Georgetown Lake	31.0	19.3	24.0	21.8

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

BITTERROOT RIVER BASIN

MONTANA

as of
APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow cover is presently about 45 percent larger than a year ago and a little above the 1948-62 average. The snow pack is quite dense for this time of year and will help delay high elevation snow melt.

Late season irrigation supplies are expected to be near to a little above average.

Streamflow for the April through September period is forecast a little above average in the southern portion of the drainage and near to a little below average in the northern part.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION 3440 BITTERROOT RIVER NEAR DARBY	765	605	630	663	608	557	523	540	740	515	531	593	521	398	545	582	534	783	740	
STATION NO. 3475 BLODGETT CREEK NEAR CORVALLIS	51.3	45	51	46	42	40	52	45	51	42	42	47	36	39	41	45	35	48	55	

Report prepared by
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

BITTERROOT RIVER BASIN

MT-5b

SNOW SURVEY DATA

WATERSHED 5

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE NO.	NAME	ELEVATION	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SNOW DEPTH	CURRENT DATA: WATER CONTENT	PAST RECORD: WATER CONTENT: LAST YEAR	PAST RECORD: WATER CONTENT: AVERAGE
13C16	Ambrose	6480	3/26	47	15.4	12.8	14.3*
13D01	East Fork R. S.	5400	3/26	24	7.0	5.4	7.7
13D02	Gibbons Pass	7100	3/28	64	26.2	15.4	25.0
14D03	Kit Carson	5020	3/31	30	10.6	6.6	9.0
14C05	Lolo Pass	5230	3/27	94	37.8	27.5	36.4*
14C07	Lost Horse	5940	3/28	93	34.5	22.8	35.6*
13D16	Moose Creek	6200	3/31	50	18.4	10.4	17.1
14D02	Nez Perce Camp	5680	3/31	49	17.4	10.5	15.8
14D01	Nez Perce Pass	6570	3/31	52	19.4	13.1	18.3
13D22	Saddle Mountain	7940	3/30	80	28.4	18.4	-
14C04	Savage Pass	6600	3/27	85	32.0	25.9	30.5*
13C03	Skalkaho Summit	7260	3/30	82	30.8	20.4	27.4
14C08	Twin Lakes	6510	3/28	119	46.3	30.8	46.7*

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION NO.	NAME	ELEVATION	SOIL PROFILE: DEPTH	SOIL PROFILE: FIELD CAPACITY	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SOIL MOISTURE	PAST RECORD: LAST YEAR	PAST RECORD: **AVERAGE
13D18M	Gibbons Pass	7100	48	7.1	3/26	4.8	5.0	5.4
14C05M	Lolo Pass	5250	48	10.6	3/27	4.0	6.2	6.2
13C03M	Skalkaho Summit	7260	48	10.8	3/30	9.9	10.0	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 5

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE
	WEST FORK BITTERROOT RIVER					
3425	Conner (near)(5)	Apr-Sept	193	108	74	179
	EAST FORK BITTERROOT RIVER					
3434	Conner (near)	Apr-Sept	185	109	83.6	169
	BITTERROOT RIVER					
3440	Darby (near)	Apr-Sept	590	101	273	582
	SKALKAHO CREEK					
3465	Hamilton (near)	Apr-Sept	60.5	100	35.1	60.6
	BLODGETT CREEK					
3475	Corvallis (near)	Apr-Sept	45.0	101	30.2	44.6
	BITTERROOT RIVER					
3528	Missoula (at)(6)	Apr-Sept	1510	97	813	1553

(5) Adjusted for storage in Painted Rocks Reservoir.
(6) Difference in observed flow, Clark Fork above and below Missoula.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
3420	Painted Rocks	31.7	15.2	14.5	14.1
3445	Como	34.9	11.8	16.2	13.4

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK
MARIAS, TETON and SUN RIVER BASINS
MONTANA

as of
APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow pack is presently third highest to maximum of record. It is now about 70 percent more than was measured a year ago and 40 percent greater than the 1948-62 average. The snow pack is dense and should help delay high elevation melt. Late season irrigation supplies are expected to be near to above average.

Streamflow for the April through September period is forecast about 110 to 120 percent average, or about the same volume as 1965. The water levels will depend largely on temperatures and precipitation during the snow melt period.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 9786 SUN RIVER AT GIBSON DAM	741	411	712	752	499	738	748	517	669	531	555	749	436	474	616	610	387	737	702	
STATION NO. 0995 MARIAS RIVER NEAR SHELBY	1132	340	950	1013	457	928	782	600	683	510	483	698	405	380	398	651	280	937	751	

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SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

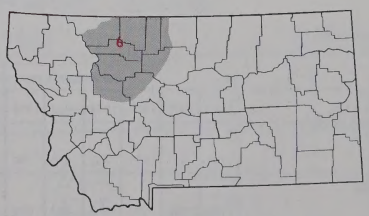
"The Conservation of Water begins with the Snow Survey"

MARIAS, TETON and SUN RIVER BASINS

10 0 10 20 30 40
SCALE IN MILES

LEGEND

- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary



WATERSHED LOCATION

SNOW SURVEY DATA

WATERSHED 6

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
NO.	NAME	ELEVATION				LAST YEAR	AVERAGE
13A15	Badger Pass	6900	4/2	111	43.4	34.2	-
13A11	Beaver Lake	5900	4/2	78	31.1	21.6	-
12B06	Cabin Creek	5200	4/2	36	14.4	7.4	7.0*
12B09	Five-Bull	5700	4/2	32	12.1	6.3	7.1*
12A01	Freight Creek	6000	4/2	57	23.3	15.4	17.0
12B07	Goat Mountain	7000	4/1	47	16.0	9.1	12.3
13A18	Hudson Bay Divide	5800	3/29	65	23.6	15.9	-
13A05	Marias Pass	5250	3/29	68	24.3	18.3	20.1
13A16	Mineral Creek	4000	3/30	75	33.7	18.1	22.9
12B04	Wrong Creek	5700	4/2	52	21.6	15.6	15.8*
12B03	Wrong Ridge	6800	4/2	67	28.4	19.9	22.2*

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
			DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
NO.	NAME	ELEVATION						
13A05M	Marias Pass	5250	54	6.5	3/31	5.5	5.8	5.5

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 6

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE
	SUN RIVER					
0786	Gibson Dam (at)(18)	Arp-Sept	730	120	450	610
	MISSOURI RIVER					
0908	Fort Benton (at)(17)	Apr-Sept	4000	120		3319
	TWO MEDICINE CREEK					
0920	Browning (near)(19)	Apr-Sept	320	118	208	271
	BADGER CREEK					
0925	Browning (near)	Apr-Sept	165	115	107	143
	CUT BANK CREEK					
0990	Cut Bank (at)	Apr-Sept	147	112	89.2	131
	MARIAS RIVER					
0995	Shelby (near)(20)	Apr-Sept	730	112	435	651

(17) Adjusted for storage in Canyon Ferry Reservoir.
(18) Adjusted for storage in Gibson Reservoir and diversions.
(19) Adjusted for storage in Two Medicine Reservoir and diversions into Two Medicine Canal.
(20) Adjusted for storage in Two Medicine, Four Horns, Lake Frances and Swift Reservoir.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
0795	Gibson	105.0	24.3	52.6	60.6
0805	Pishkun	32.0	15.8	18.8	18.2
0820	Willow Creek	32.3	16.6	25.2	21.0
0930	Four Horns	20.0	11.6	12.0	10.6
0940	Swift	30.0			23.9
0955	Lake Frances	112.0	72.1	93.7	92.8
1013	Tiber	1,347.0	466.4	724.7	647.4

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK
MISSOURI RIVER (MAIN STEM) BASIN
MONTANA
as of
APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow pack is presently a little above average along the Continental Divide and well above average in the mountains east of the Missouri River. Over all, snow accumulation averages about 85 percent more than a year ago and 35 percent above the 1948-52 average. The snow pack is quite dense for this time of year and should help delay high elevation runoff. Late season irrigation supplies are expected to be near average on tributaries west of the Missouri and above average on those from the Big Belt and Little Belt mountains.

Streamflow for the April through September period is forecast to be a little above average from west side streams. Volumes produced by east side streams is expected to be a little less than the large volumes produced in 1965.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 0615 PRICKLY PEAR CREEK NEAR CLANCY	42	22	27	26	22	27	16	22	16	15	24	18	19	10	23	22	19	36	26	
STATION NO. 0770 SHEEP CREEK NEAR WHITE SULPHUR SPRINGS	24	16	17	18	18	25	13	18	12	15	11	20	14	10	17	17	17	27	32	
STATION NO. 0545 MISSOURI RIVER AT TOSTON	3475	2512	2220	2319	2895	2139	1561	1730	2345	2187	1971	1991	1774	1102	2347	2147	2199	2710	3432	

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SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

MISSOURI RIVER (MAIN STEM) BASIN

SNOW SURVEY DATA

WATERSHED 7

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE NO.	NAME	ELEVATION	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SNOW DEPTH	CURRENT DATA: WATER CONTENT	PAST RECORD: WATER CONTENT: LAST YEAR	PAST RECORD: WATER CONTENT: AVERAGE
11C01	Boulder Mountain	7950	3/28	62	21.1	14.7	15.5*
12C05	Chessman Reservoir	6200	3/29	20	5.6	1.2	4.9
10C09	Deadman Creek	6450	3/31	50	16.8	7.0	-
10C07	Elk Peak	8000	3/29	68	22.2	13.7	15.8*
10C02	Grasshopper	7000	3/30	34	7.8	3.5	5.7
10C01	Kings Hill	7500	3/27	59	19.4	10.1	13.6
10C06	Spur Park	8000	3/31	89	31.3	16.4	19.2*
10C06	Spur Park Pillow	8000	3/31	SP	29.9	-	-
12C01	Stemple Pass	6600	3/30	47	15.4	8.3	11.0
12C02	Ten Mile Lower	6600	3/29	32	10.2	3.4	7.2
12C03	Ten Mile Middle	6800	3/28	40	13.3	7.0	11.2
12C04	Ten Mile Upper	8000	3/28	45	15.1	9.3	14.3

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION NO.	NAME	ELEVATION	SOIL PROFILE: DEPTH	SOIL PROFILE: FIELD CAPACITY	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SOIL MOISTURE	PAST RECORD: LAST YEAR	PAST RECORD: **AVERAGE
10C01M	Kings Hill	7420	48	11.8	3/31	4.8	8.8	8.2
12C08M	Stemple Pass	6350	48	5.9	3/31	4.0	5.2	4.7

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 7

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	MISSOURI RIVER					
0545	Toston (at)(16)	Apr-Sept	2600	121	1119	2147
	PRICKLY PEAR CREEK					
0615	Clancy (near)	Apr-Sept	25.0	114	15.5	22.0
	SHEEP CREEK					
0770	W. Sulphur Springs (nr)	Apr-Sept	29.0	176	19.1	16.5
	SUN RIVER					
0786	Gibson Dam (at)(17)	Apr-Sept	730	120	450	610
	MISSOURI RIVER					
0908	Fort Benton (at)(18)	Apr-Sept	4000	120		3319

(16) Adjusted for storage in Hebgen and Ennis Lakes and Clark Canyon Reservoir.
(17) Adjusted for storage in Gibson Reservoir and diversions.
(18) Adjusted for storage in Canyon Ferry Reservoir.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
0585	Canyon Ferry	2,043.0	1,028.0	1,506.0	1,529.0
0645	Lake Helena	10.4	10.2	10.0	5.6
0650	Hauser Lk & Lk. Helena	61.9	61.3	60.7	44.6
0660	Holter Lake	81.9	80.6	80.0	51.7
0750	Smith River	10.7	6.0	9.4	6.5

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

JEFFERSON RIVER and TRIBUTARY BASINS

MONTANA

as of
APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow pack is presently about 80 percent more than a year ago. The Big Hole-Boulder drainage is about 10 percent above the 1948-62 average, while Red Rock-Beaverhead drainage is about 20 percent above average. In the upper Red Rock, snow pack is second to third highest of record. The snow pack is quite dense for this time of year and should help delay high elevation runoff. Late season irrigation supplies are expected to be near to a little above average on the Big Hole, Beaverhead, Red Rock and Ruby drainages and near average on the Boulder drainage.

Streamflow is forecast a little above average on most streams in this area except for the Red Rock and Ruby, where above average volume of runoff is expected.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 0215 RED ROCK RIVER NEAR MONIDA	81	78	100	70	127	81	58	71	60	105	93	54	55	36	110	78	60	110	136	
STATION NO. 0255 BIG HOLE RIVER NEAR MELROSE	1159	749	778	861	808	745	541	592	842	720	714	645	556	397	671	718	681	849	1166	
STATION NO. 0330 BOULDER RIVER NEAR BOULDER	136	65	81	92	85	84	49	73	76	67	82	68	73	46	70	76	81	108	139	

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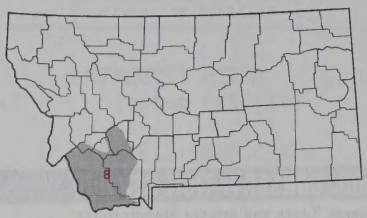
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

JEFFERSON RIVER and TRIBUTARY BASINS



WATERSHED LOCATION

LEGEND

- Snow Pillow
- Precipitation Gage
- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary

SNOW SURVEY DATA

WATERSHED 8

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE NO.	NAME	ELEVATION	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SNOW DEPTH	CURRENT DATA: WATER CONTENT	PAST RECORD: WATER CONTENT: LAST YEAR	PAST RECORD: WATER CONTENT: AVERAGE
13D20	Abundance Lake	8800	3/28	59	21.2	14.1	-
12C07	Berry Meadow	7300	3/27	33	10.2	5.8	7.8*
13D10	Bloody Dick	7600	3/31	41	12.4	7.2	11.7
11D07	Call Road	8050	3/31	54	14.7	8.4	-
12D04	Carter Creek	7400	3/31	42	9.4	4.2	-
12C05	Chessman Reservoir	6200	3/29	20	5.6	1.2	4.9
11D08	Clover Meadow	8600	3/31	77	21.7	12.9	-
12C09	Copper Mountain	7700	3/30	47	13.4	9.0	-
13E22	Dad Creek Lake	8400	3/30	61	17.4	10.3	-
13D19	Darkhorse Lake	8600	3/30	77	31.0	18.6	-
12E07	Divide	7900	3/31	49	13.1	7.6	-
13D15	Elk Horn Springs	7800	3/28	34	10.0	6.6	10.4
13D21	Foolhen	8280	3/28	61	21.5	10.9	-
11D12	Four Mile	6900	3/29	39	8.9	5.8	-
13D02	Gibbons Pass	7100	3/28	64	26.2	15.4	25.0
13D09	Gold Stone	8100	3/31	51	16.6	10.1	15.3
13D08	Jahnke Creek	7340	3/31	37	10.8	5.2	11.2
11E04	Lakeview Canyon	6930	3/30	56	17.5	9.8	10.8
11E03	Lakeview Ridge	7400	3/30	56	16.7	8.4	9.7
13E01	Lemhi Pass	7480	3/30	36	9.4	5.6	9.2
13E23	Lemhi Ridge	8100	3/30	37	10.0	-	-
11D11	Lower Twin	7900	3/29	71	21.2	16.2	-
11D03	North Meadow	7500	3/29	40	9.0	6.2	9.4*
12E06	Notch	8500	3/31	67	18.7	12.7	-
12C06	Picnic Grounds	6500	3/31	23	6.1	2.4	4.8*
12D01	Pipestone Pass	7200	3/28	25	7.0	4.6	6.2
13C07	Storm Lake	7780	3/27	48	15.5	9.8	15.5
12C02	Ten Mile Lower	6600	3/29	32	10.2	3.4	7.2
12C03	Ten Mile Middle	6800	3/28	40	13.3	7.0	11.2
12C04	Ten Mile Upper	8000	3/28	45	15.1	9.3	14.3
13E02	Trail Creek	7090	3/30	36	9.3	5.6	8.8
11E27	Upper West Fork	8750	3/30	68	19.1	14.4	-
12E01	White Pine Ridge	8850	3/30	32	5.2	2.3	5.9

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION NO.	NAME	ELEVATION	SOIL PROFILE: DEPTH	SOIL PROFILE: FIELD CAPACITY	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SOIL MOISTURE	PAST RECORD: LAST YEAR	PAST RECORD: **AVERAGE
13D18M	Gibbons Pass	7100	48	7.1	3/26	4.8	5.0	5.4
11E13M	Lakeview	6700	48	15.3	4/5	6.7	6.4	9.3

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 8

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	RED ROCK RIVER					
0110	Kennedy Ranch (at)	Apr-Sept	90.0	125	50.2	71.7
	RED ROCK RIVER					
0125	Monida (near)(11)	Apr-Sept	99.0	126	55.1	78.4
	RUBY RIVER					
0195	Alder (near)	Apr-Sept	98.0	123	60.6	79.6
	BIG HOLE RIVER					
0255	Melrose (near)	Apr-Sept	780	109	300	718
	BIRCH CREEK					
0260	Glen (near)	Apr-Sept	13.5	110	6.5	12.3
	BOULDER RIVER					
0330	Boulder (near)	Apr-Sept	84.0	110	53.2	76.3
	JEFFERSON RIVER					
0345	Sappington (at)912)	Apr-Sept	1080	111	331	974

(11) Adjusted for storage in Lima Reservoir.
(12) Adjusted for storage in Clark Canyon Reservoir.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
0120	Lima	84.0	14.0	47.3	27.3
0153	Clark Canyon	328.9	115.0	156.3	-
0205	Ruby	38.8		-	26.1

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

MADISON and GALLATIN RIVER BASINS

MONTANA

as of

APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The high elevation snow pack is fifth highest to maximum of record and 30 percent above average in the Gallatin River drainage. In the Madison the pack is about 10 percent above the 1948-62 average. The snow pack is about 50 percent more than a year ago in the Madison and 75 percent greater than last year in the Gallatin. The snow pack in the Tobacco Root mountains continues to be below the other areas but is near average. The snow pack is dense and should help delay high elevation runoff. Late season irrigation supplies are expected to be above average on the Gallatin River tributaries and streams on the east side of the Madison and from the Gravelly Range. Streams with headwaters in the Tobacco Root mountains should produce near average late season supplies.

Streamflow for the April through September period is forecast above average for all streams. Those in the Gallatin drainage are forecast near the large volume produced in 1965. The Gallatin River near Gateway is forecast to be slightly higher than the largest volume record in the past 30 years.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 0385 MADISON RIVER NEAR GRAYLING	406	424	444	468	563	434	420	345	489	454	359	366	327	329	468	420	430	474	577	
STATION NO. 0435 GALLATIN RIVER NEAR GALLATIN GATEWAY	566	393	454	399	596	404	365	350	499	469	384	507	416	331	577	447	455	551	649	
STATION NO. 0485 BRIDGER CREEK NEAR BOZEMAN	42	12	19	19	28	27	12	17	19	14	15	24	21	9	21	20	28	24	31	

Report prepared by
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

"The Conservation of Water begins with the Snow Survey"

MADISON and GALLATIN RIVER BASINS

SNOW SURVEY DATA

WATERSHED 9

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE NO.	NAME	ELEVATION	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SNOW DEPTH	CURRENT DATA: WATER CONTENT	PAST RECORD: WATER CONTENT: LAST YEAR	PAST RECORD: WATER CONTENT: AVERAGE
10D14	Arch Falls	7350	3/30	53	16.8	9.3	12.1*
11D09	Bear Basin	8150	3/29	79	25.1	14.3	20.4*
10D15	Bridger Bowl Pillow	7250	3/31	SP	32.8	21.8	-
11D07	Call Road	8050	3/31	54	14.7	8.4	-
10E03	Canyon	7750	3/30	63	21.7	13.0	16.3
11E29	Carrot Basin Pillow	9000	3/22	SP	36.3	-	-
11D08	Clover Meadow	8600	3/31	77	21.7	12.9	-
10D04	Devil's Slide	8100	3/30	83	26.8	16.4	22.3
11D12	Four Mile	6900	3/29	39	8.9	5.8	-
11E25	Freezeout Lake	7200	3/22	39	10.8	7.1	-
11E26	Freezeout Mountain	8250	3/22	64	20.4	14.2	-
11E05	Hebgen Dam	6550	3/28	39	13.3	7.2	12.2
10D03	Hood Meadow	6600	3/30	46	13.4	6.2	10.0
11D05	Jack Creek	7500	3/28	25	7.8	4.0	6.9*
11E22	Lake Creek	6100	3/23	31	9.8	6.2	-
10D13	Lick Creek Pillow	6860	3/24	SP	14.1	7.0	-
11E28	Lion Mountain Pillow	8760	3/30	SP	19.8	-	-
11D10	Little Park	7400	3/29	63	19.4	10.7	14.8*
11D11	Lower Twin	7900	3/29	71	21.2	16.2	-
10D18	Maynard Creek Pillow	6210	3/31	SP	14.4	-	-
11E23	Meridian Creek	7000	3/22	38	10.8	6.5	-
10D01	New World	6700	4/3	44	16.2	9.0	10.8
11E02	Norris Basin	7500	4/1	47	13.6	6.9	9.9*
11D03	North Meadow	7500	3/29	40	9.0	6.2	9.4*
11E21	Potomageton Park	7150	3/31	59	21.0	11.4	-
10D10	Sacajawea	6550	3/31	55	17.2	11.8	13.0*
11E20	Sentinel Creek	8300	3/31	90	32.1	18.2	-
10D16	Shower Falls Pillow	8100	3/30	SP	27.4	20.3	-
11E24	Tepee Creek	8000	3/23	56	17.2	10.0	-
10E07	Thumb Divide	7900	3/30	76	26.8	21.1	24.2
11E06	Twenty-One Mile	7150	3/27	66	24.5	13.9	18.2
11E07	West Yellowstone	6700	3/28	53	17.0	7.9	11.7
11E07	West Yellowstone Pillow	6700	3/28	SP	14.2	-	-

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION NO.	NAME	ELEVATION	SOIL PROFILE: DEPTH	SOIL PROFILE: FIELD CAPACITY	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SOIL MOISTURE	PAST RECORD: LAST YEAR	PAST RECORD: **AVERAGE
10D11M	Battle Ridge	6020	48	17.6	3/31	15.2	14.8	13.6
10D15M	Bridger Bowl	7250	48	15.8	3/31	15.2	16.7	-
11D02M	College Site	4856	54	14.5	3/31	14.6	13.8	11.4
10D13M	Lick Creek	6860	48	18.8	3/27	19.1	14.8	-
10D04M	Red Bluff	4800	40	4.7	4/1	2.4	2.3	2.4
11E06M	Twenty-One Mile	7150	48	10.0	3/28	2.8	3.0	2.8
11E07M	West Yellowstone	6700	48	6.5	3/28	2.6	-	-

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 9

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	MADISON RIVER					
0375	West Yellowstone (near)	Apr-Sept	244	117	195	208
	MADISON RIVER					
0385	Grayling (near)(13)	Apr-Sept	495	118	378	420
	MADISON RIVER					
0410	McAllister (near)(14)	Apr-Sept	905	126	620	718
	GALLATIN RIVER					
0435	Gateway (near)	Apr-Sept	625	140	389	447
	BRIDGER CREEK					
0485	Bozeman (near)	Apr-Sept	31.0	156	17.6	19.9
	HYALITE CREEK					
0500	Bozeman (near)(15)	Apr-Sept	50.8	143	37.6	35.6
	GALLATIN RIVER					
0525	Logan (at)	Apr-Sept	732	157	320	467
	MISSOURI RIVER					
0545	Toston (at)(16)	Apr-Sept	2600	121	1119	2147

(13) Adjusted for storage in Hebgen Lake.
(14) Adjusted for storage in Hebgen and Ennis Lakes.
(15) Adjusted for storage in Middle Creek Reservoir.
(16) Adjusted for storage in Hebgen and Ennis Lakes and Clark Canyon Reservoir.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
0380	Hebgen Lake	377.5	195.1	222.3	179.1
0405	Ennis Lake	41.0	39.4	39.2	36.4
0495	Middle Creek	8.0	3.5	2.4	3.9

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK
JUDITH and MUSSELSHELL RIVER BASINS
MONTANA

as of

APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The mountain snow pack is presently second highest to maximum of record in the higher elevations and above average at lower elevations. Amounts are comparable to the 1965 season. The mountain snow accumulation is now about 90 percent greater than a year ago and 50 percent above the 1948-62 average. The snow pack is dense and should help delay the high elevation runoff. Late season irrigation supplies are expected to be above average.

Streamflow is forecast fourth to sixth largest volume in the past 30 years. The water levels will depend largely on precipitation and temperatures during the snow melt period, as snow melt alone will keep streams near the bank full stage.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 1185 SOUTH FORK MUSSELSHELL RIVER ABOVE MARTINSDALE	97	49	68	54	79	55	27	25	47	56	26	57	32	11	50	49	45	56	74	
STATION NO. 1098 SOUTH FORK JUDITH RIVER NEAR UTICA												13	9	3	14	12	10	19	17	

Report prepared by

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SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
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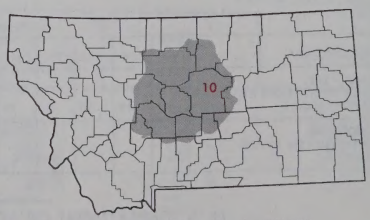
"The Conservation of Water begins with the Snow Survey"

JUDITH and MUSSELSHELL RIVER BASINS

LEGEND

- Snow Pillow
- Precipitation Gage
- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary



WATERSHED LOCATION

SNOW SURVEY DATA

WATERSHED 10

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
9C02	Avalanche	7100	4/5	84	30.9	16.3	-
10C05	Bald Ridge	7500	3/28	46	15.6	10.0	11.7*
9C01	Crystal Lake	6100	3/31	56	19.1	7.2	12.2
10C09	Deadman Creek	6450	3/31	50	16.8	7.0	-
10C07	Elk Peak	8000	3/29	68	22.2	13.7	15.8*
10C02	Grasshopper	7000	3/30	34	7.8	3.5	5.7
10C01	Kings Hill	7500	3/27	59	19.4	10.1	13.6
10C03	Porcupine R. S.	6500	3/28	31	9.4	6.3	7.7
9C03	Rock Creek	5600	3/31	43	17.3	5.1	-
9A01	Rocky Boy	5200	4/1	31	8.1	3.3	4.3
10C08	South Fork Shields	8100	3/28	80	29.6	21.2	-
10C06	Spur Park	8000	3/31	89	31.3	16.4	19.2*
10C06	Spur Park Pillow	8000	3/31	SP	29.9	-	-

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
10C01M	Kings Hill	7420	48	11.8	3/31	4.8	8.8	8.2

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 10

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE
	JUDITH RIVER					
1100	Utica (near)	Apr-Sept	54.0	161		33.5
	MISSOURI RIVER					
1150	Zortman (near)(21)	Apr-Sept	5400	118		4508
	N. FORK MUSSELSHELL RIVER					
1155	Delpine (near)	Apr-Sept	8.5	142	4.0	6.0
	S. FORK MUSSELSHELL RIVER					
1185	Martinsdale (above)	Apr-Sept	66.0	135	44.2	48.8

(21) Corrected for storage in Canyon Ferry and Tiber Reservoirs.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
1105	Ackley Lake	5.8		-	3.5
1165	Durand	7.0	4.2	6.1	4.9
1190	Martinsdale	23.1	7.4	12.4	8.7
1225	Deadman's Basin	72.2	45.8	68.8	41.6

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK
UPPER YELLOWSTONE RIVER BASIN
MONTANA

as of
APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

High elevation snow courses in the Absaroka-Beartooth Range have water content from fourth highest to maximum of record. Other areas are generally above average. Presently the mountain snow pack is about 75 percent larger than a year ago and 30 percent greater than the 1948-62 average. It is quite dense for this time of year and should help delay high elevation runoff. Late season irrigation supplies are expected to be above average on all drainages except the Clarks Fork where late season supplies will be near average.

Streamflow from streams originating in the Absaroka-Beartooth Range is forecast to be third to fourth largest volume in the past 30 years. The Yellowstone and Clarks Fork are forecast about 15 to 20 percent above average. The heighth of water levels will depend largely on the precipitation and temperatures during the melt season, as snow melt will keep most streams near bank full stage.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
STATION NO. 1935 SHIELDS RIVER AT CLYDE PARK	217	113	116	94	162	130	65	72	97	77	50	106	63	36	86	99	101	133	162	
STATION NO. 1925 YELLOWSTONE RIVER NEAR LIVINGSTON	2480	2216	2427	2474	2417	1820	2232	1621	2689	2272	1630	2098	1527	1440	2562	2127	2128	2392	2982	
STATION NO. 2075 CLARK FORK YELLOWSTONE RIVER AT CHANCE	588	564	713	757	576	519	600	419	716	715	487	648	386	442	622	583	593	602	763	

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"The Conservation of Water begins with the Snow Survey"

UPPER YELLOWSTONE RIVER BASIN

MT-11b

SNOW SURVEY DATA

WATERSHED 11

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT	
NO.	NAME	ELEVATION				LAST YEAR	AVERAGE
10C05	Bald Ridge	7500	3/28	46	15.6	10.0	11.7*
10D15	Bridger Bowl Pillow	7250	3/31	SP	32.8	21.8	-
9D01	Camp Senia	7890	4/3	34	10.0	4.4	6.3
10E03	Canyon	7750	3/30	63	21.7	13.0	16.3
9D07	Cooke Station	8150	3/31	77	26.7	13.3	-
10D05	Crevice Mountain	8400	3/30	44	14.1	6.2	9.5
10D04	Devil's Slide	8100	3/30	83	26.8	16.4	22.3
10E06	East Entrance	7000	3/31	30	10.0	5.0	11.3*
9D06	Fisher Creek	9100	3/31	133	51.4	33.6	-
9D06	Fisher Creek Pillow	9100	3/31	SP	47.7	-	-
9D05	Grizzly Peak	8400	3/30	62	20.3	12.0	15.7*
10D06	Independence	8000	3/24	69	24.9	13.1	19.2*
10E04	Lake Camp	7850	3/29	45	14.0	6.2	11.1
9E01	Lodgepole	8200	3/31	46	15.0	7.3	11.8*
10E01	Lupine Creek	7300	3/28	49	15.2	7.8	11.2
10D12	Monument Peak	9000	3/24	94	33.8	19.3	23.0*
10E02	Norris Basin	7500	4/1	47	13.6	6.9	9.9*
10D07	Northeast Entrance	7400	4/3	37	14.0	4.6	9.3
10D07	Northeast Entrance Pillow	7350	3/29	SP	12.2	-	-
10C03	Porcupine R. S.	6500	3/28	31	9.4	6.3	7.7
10D10	Sacajawea	6550	3/31	55	17.2	11.8	13.0*
10D16	Shower Falls Pillow	8100	3/30	SP	27.4	20.3	-
10C08	South Fork Shields	8100	3/28	80	29.6	21.2	-
10E05	Sylvan Pass	7100	3/31	49	15.0	10.0	14.9
10E07	Thumb Divide	7900	3/30	76	26.8	21.1	24.2
9D04	Timberline Creek	8850	4/3	59	23.0	11.4	14.1*
9D02	West Rosebud	7500	3/31	49	20.8	-	-
9D08	White Mill	8700	3/31	102	36.6	-	-

SP - Snow pillow observation - water content only.

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
			DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
NO.	NAME	ELEVATION						
10D11M	Battle Ridge	6020	48	17.6	3/31	15.2	14.8	13.6
10D15M	Bridger Bowl	7250	48	15.8	3/31	15.2	16.7	-
10D07M	Northeast Entrance	7350	48	9.4	4/4	4.9	7.4	7.0

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 11

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
1915	YELLOWSTONE RIVER Corwin Springs (at)	Apr-Sept	2200	117	1494	1877
1925	YELLOWSTONE RIVER Livingston (near)	Apr-Sept	2550	120	1628	2127
1935	SHIELDS RIVER Clyde Park (at)	Apr-Sept	138	139	68.3	99.0
2000	BOULDER RIVER Big Timber (at)	Apr-Sept	445	130	229	343
2050	STILLWATER RIVER Absarokee (near)(25)	Apr-Sept	700	127	434	552
2075	CLARKS FORK RIVER Chance (at)	Apr-Sept	670	115	431	583
2085	CLARKS FORK RIVER Edgar (at)	Apr-Sept	690	114	430	609
2095	ROCK CREEK Red Lodge (near)	Apr-Sept	142	138	91.4	103
2145	YELLOWSTONE RIVER Billings (at)	Apr-Sept	4850	124	2938	3913

(25) Adjusted for storage in Mystic Lake.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
2040	Mystic Lake	20.8	4.4	6.6	4.8
2120	Cooney	27.5	14.5	22.0	13.5

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).

WATER SUPPLY OUTLOOK

MILK RIVER BASIN

MONTANA

as of

APRIL 1, 1967

UNITED STATES DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Data included in this report were obtained in cooperation with other Federal, State and private organizations

The high elevation snow pack is second highest to maximum of record in the St. Mary headwaters and maximum of record in the Bow River headwaters and Bear Paw mountains. The Bow River pack is double that of a year ago and 170 percent of the 1948-62 average. Courses in the Milk and St. Mary headwaters are about 70 percent greater than a year ago and 35 percent above average.

Streamflow of the Milk River is forecast below average in anticipation of below average diversion required through the St. Mary Canal because of large reservoir storage. The total for the Milk River and reservoir storage is about 400,000 acre feet, which is 110 percent average. Runoff in the St. Mary River is forecast slightly more than the highest volume produced in the past 30 years.

STREAMFLOW (APRIL THROUGH SEPTEMBER)

STREAM GAGING STA.	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1948-62 Average	1963	1964	1965	1966
MILK RIVER AT EASTERN CROSSING	304	190	223	312	227	359	232	255	255	230	259	275	217	209	212	250	227	280	332	
RESERVOIR STORAGE SUM FRESNO AND NELSON ON APRIL 1	110	108	24	116	182	115	124	124	132	160	111	129	184	74	53	116	92	67	118	
SUM STREAMFLOW AND RESERVOIR STORAGE	414	298	247	428	409	474	356	279	387	390	370	404	401	283	265	366	319	347	450	

Report prepared by

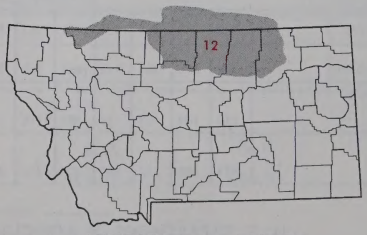
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
SNOW SURVEY AND WATER SUPPLY FORECASTING UNIT
BOX 98, BOZEMAN, MONTANA 59715

"The Conservation of Water begins with the Snow Survey"

MILK RIVER BASIN

LEGEND

- Snow Survey Course
- Soil Moisture Station
- Snow Course and Soil Moisture Station
- Aerial Marker at Snow Course
- Stream Gaging Station
- Drainage
- S.W.C.D. Boundary
- Watershed Boundary
- Highway
- Town
- County Boundary
- State Boundary



WATERSHED LOCATION

SNOW SURVEY DATA

WATERSHED 12

AS OF APRIL 1, 1967

(Inches)

SNOW COURSE NO.	NAME	ELEVATION	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SNOW DEPTH	CURRENT DATA: WATER CONTENT	PAST RECORD: WATER CONTENT: LAST YEAR	PAST RECORD: WATER CONTENT: AVERAGE
13A18	Hudson Bay Divide	5800	3/29	65	23.6	15.9	-
13A05	Marias Pass	5250	3/29	68	24.3	18.3	20.1
13A16	Mineral Creek	4000	3/30	75	33.7	18.1	22.9
9A01	Rocky Boy	5200	4/1	31	8.1	3.3	4.3
	BOW RIVER - CANADA						
ALB. 1	Bow River	5100	3/30	53	17.2	8.4	9.2
ALB. 2	North Course	5400	3/30	52	17.1	7.6	9.1
ALB. 5	Lake Louise	5800	3/29	57	18.2	10.3	10.9
ALB. 6	Mirror Lake	6600	3/29	63	21.2	10.8	13.1
ALB. 8	Misc. Lake Louise	5700	3/29	56	18.8	8.9	11.7
ALB. 10	Mount Eisenhower	5000	3/28	32	8.2	5.0	-

SOIL MOISTURE DATA

AS OF APRIL 1, 1967

(Inches)

SOIL MOISTURE STATION NO.	NAME	ELEVATION	SOIL PROFILE: DEPTH	SOIL PROFILE: FIELD CAPACITY	CURRENT DATA: DATE OF SURVEY	CURRENT DATA: SOIL MOISTURE	PAST RECORD: LAST YEAR	PAST RECORD: **AVERAGE
13A05M	*Marias Pass	5350	54	6.5	3/31	5.5	5.8	5.5

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD). *ADJUSTED AVERAGE **AVERAGE FOR PERIOD OF RECORD

WATER SUPPLY FORECASTS

WATERSHED 12

AS OF APRIL 1, 1967

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW	
					LAST YEAR*	AVERAGE
	ST. MARY RIVER					
0175	Babb (near)(30)	Apr-Sept	650	132		491
	MILK RIVER					
1350	Eastern Crossing (at)	Apr-Sept	215	86	254	250

(30) Adjusted for storage in Lake Sherburne.

*PROVISIONAL DATA FURNISHED BY U. S. GEOLOGICAL SURVEY

RESERVOIR STORAGE DATA

AS OF MARCH 31, 1967

(1000 Acre Feet)

NO.	RESERVOIR	USABLE CAPACITY	THIS YEAR	LAST YEAR	AVERAGE
1365	Fresno	127.2	134.9	83.8	81.5
1550	Nelson	66.8	49.8	33.9	34.9

NOTE: ALL AVERAGES BASED ON 1948-1962 (15 YEAR PERIOD).